

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of the claims

1. (Canceled)
2. (Previously Presented) A macromonomer having the structure:



where \tilde{n} is a real number of 6-300,

and where X and Y each independently is a group of the formula



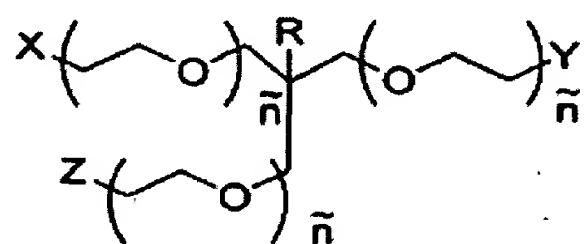
where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl,

or where X is -OH, and Y is a group of the formula



where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.

3. (Previously Presented) A macromonomer having the structure:



where R is H or alkyl or aryl or arylalkyl,

and \tilde{n} is a real number of 6-300 as defined above

and where X, Y and Z each independently is OH or a group of the formula



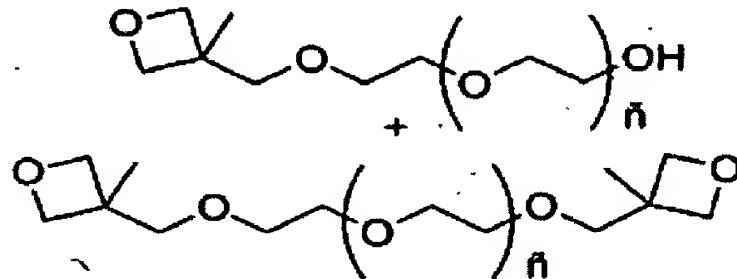
where m is an integer of 1-10, a is as defined above, and R is H or alkyl or aryl or arylalkyl;

provided that at least one of X, Y or Z is a group of the formula



where m is an integer of 1-10, a is as defined above, and R is H or alkyl or aryl or arylalkyl.

4. (Currently Amended) A macromonomer according to claim 2 which is terminated by an 3- n methyloxetan-3-ylmethyl ether group and has the formula:

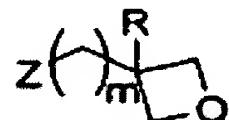


where \tilde{n} = 6-300

where R and m are as defined in claim [[1]] 2.

5. (Previously Presented) A macromonomer according to claim 4, which has been acetylated or in other ways temporarily hydroxyl-protected on free hydroxyl groups.

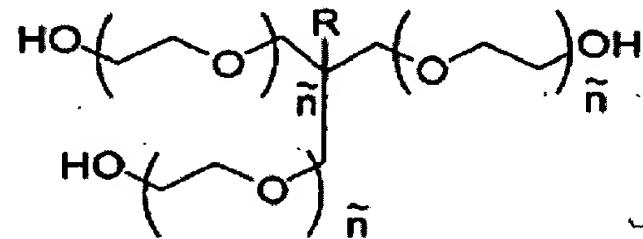
6. (Currently Amended) A process for the preparation of the macromonomer[[s]] of claim[[s 1 or]] 2 comprising reacting an alkali metal derivative of a polyethylene glycol having 6-300 repeating units with a halo substituted compound having the formula:



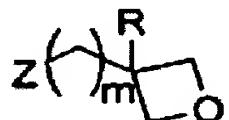
where Z is Cl, Br, I, toluenesulfonyloxy or CF_3SO_3

and where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.

7. (Previously Presented) A process for the preparation of the macromonomer of claim 3 comprising reacting an alkali metal derivative of a polyethylene glycol having the formula: -



where R is H or alkyl or aryl or arylalkyl and n is 6-300 with a halo substituted compound having the formula:



where Z is Cl, Br, I, toluenesulfonyloxy or CF_3SO_3

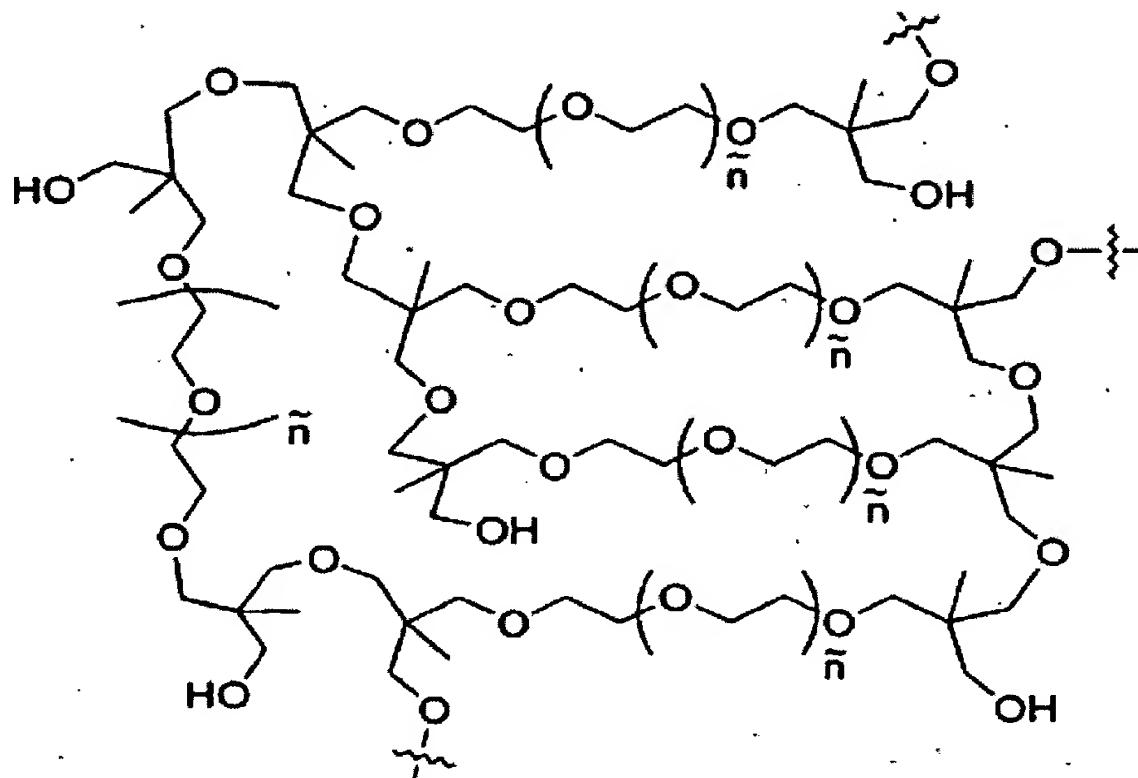
and where m is 1-10 and R is H or alkyl or aryl or arylalkyl

8. (Previously Presented) A process according to claims 6 or 3 wherein the alkali metal derivative is a sodium derivative.

9. (Previously Presented) A process according to claims 6 or 3 wherein the alkali metal derivative is a potassium derivative.

10. (Withdrawn) A cross linked polymer formed by the polymerisation of a macromonomer according to claim 2.

11. (Withdrawn) A cross linked polymer according to claim 10 wherein the macromonomer has the structure claimed in claim 4, the polymerisation is initiated by a cationic catalyst and the structure of the polymer may be represented by the structure:



where $\tilde{n} = 6-300$

where R is as defined in claim 1.

12. (Withdrawn) A crosslinked polymer according to claim 10 wherein the macromer used for its preparation has the structure of claim 5 and the per-O-acetylated or in other ways temporarily hydroxyl-protected polymer structure analog to the hydroxylated structure of claim 11 is obtained.

13. (Withdrawn) A cross linked polymer formed by the bulk polymerisation of a macromonomer of claim 3.

14. (Withdrawn) A beaded resin according to claim 11 or 12 formed by polymerization of droplets in silicon oil.

15.-27. (Canceled)

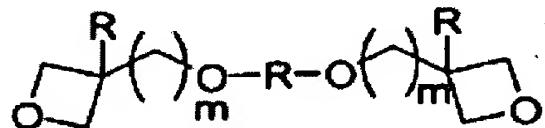
28. (Withdrawn) A beaded polymer according to claim 10 formed by suspension polymerization in silicon oil.

29. (Withdrawn) A beaded polymer according to claim 28 where the beads are stabilized by a surfactant

30. (Withdrawn) A beaded polymer according to 29 where the surfactant is obtained by radical polymerization of a mixture of acryloylated PEG-OMe and acryloyl propyl pentamethyl disiloxane.

31. (Withdrawn) A polymer according to claim 10 with addition of a short temporary crosslinker which may at a later point in time be selectively cleaved to result in expansion of the resin.

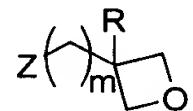
32. (Withdrawn) A polymer according to claim 31 where the short crosslinker has the structure



where R is an alkyliden, aryliden, silane, siloxane thioether or ether bridge chemically susceptible to selective cleavage conditions.

33. (Canceled)

34. (Previously Presented) A process for the preparation of the macromonomers of claim 2 comprising reacting an alkali metal derivative of a polyethylene glycol having 6-300 repeating units with a halo substituted compound having the formula:



where Z is Cl, Br, I, toluenesulfonyloxy or CF_3SO_3 , and where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.